

WHAT IS CLAIMED IS:

1. A carbonaceous material which has a total pore volume of from 0.3 to 2.0 cm<sup>3</sup>/g per unit mass, a volume of micropores having diameters of from 10 to 20 Å of from 10 to 60% based on the total pore volume, a volume of mesopores having diameters of from 20 to 200 Å of from 20 to 70% based on the total pore volume, a volume of macropores having diameters exceeding 200 Å of not more than 20% based on the total pore volume, and a specific surface area of from 1,000 to 2,500 m<sup>2</sup>/g.
2. A process for producing a porous carbonaceous material, which comprises the following steps (1) to (4):
- (1) a step of curing a liquid thermosetting resin which contains a volatile component having a boiling point of from 120 to 400°C and which has a viscosity of from 0.1 to 100 Pa·s at 25°C, to obtain a cured product;
  - (2) a step of pulverizing the cured product;
  - (3) a step of carbonizing the cured product thus pulverized in a non-oxidizing atmosphere so that the mass reduction till 400°C in the carbonization is from 2 to 50 mass% of the mass before carbonization, to obtain a carbonized product; and
  - (4) a step of activating the carbonized product.
3. The process for producing a carbonaceous material according to Claim 2, wherein, in the step (1), a curing agent is added to the thermosetting resin, followed by kneading, and further, a curing accelerator is added

thereto, followed by kneading to obtain a kneaded product, and then said kneaded product is cured to obtain a cured product.

4. The process for producing a carbonaceous material according to Claim 3, wherein the curing agent is added in an amount of at least 1 mass% based on the thermosetting resin.

5. The process for producing a carbonaceous material according to Claim 3, wherein the curing accelerator is added in an amount of at most 5 mass% based on the thermosetting resin.

6. The process for producing a carbonaceous material according to Claim 2, wherein the thermosetting resin is a phenolic resin.

7. The process for producing a carbonaceous material according to Claim 2, wherein after the step (4) has been completed, the carbonaceous material has a total pore volume of from 0.3 to 2.0 cm<sup>3</sup>/g per unit mass, a volume of micropores having diameters of from 10 to 20 Å of from 10 to 60% based on the total pore volume, a volume of mesopores having diameters of from 20 to 200 Å of from 20 to 70% based on the total pore volume, a volume of macropores having diameters exceeding 200 Å of not more than 20% based on the total pore volume, and a specific surface area of from 1,000 to 2,500 m<sup>2</sup>/g.

8. An electric double layer capacitor which has electrodes comprising a carbonaceous material having a

total pore volume of from 0.3 to 2.0 cm<sup>3</sup>/g per unit mass, a volume of micropores having diameters of from 10 to 20 Å of from 10 to 60% based on the total pore volume, a volume of mesopores having diameters of from 20 to 200 Å of from 20 to 70% based on the total pore volume, a volume of macropores having diameters exceeding 200 Å of not more than 20% based on the total pore volume, and a specific surface area of from 1,000 to 2,500 m<sup>2</sup>/g.

9. The electric double layer capacitor according to Claim 8, which has an organic electrolytic solution.

10. The electric double layer capacitor according to Claim 9, wherein the organic electrolytic solution contains at least one solvent selected from the group consisting of ethylene carbonate, propylene carbonate, butylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, acetonitrile, gultaronitrile, valeronitrile, sulfolane and a sulfolane derivative, and a salt comprising a quaternary onium cation represented by R<sup>1</sup>R<sup>2</sup>R<sup>3</sup>R<sup>4</sup>N<sup>+</sup> or R<sup>1</sup>R<sup>2</sup>R<sup>3</sup>R<sup>4</sup>P<sup>+</sup> (wherein each of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> which are independent of one another, is a C<sub>1-6</sub> alkyl group) and at least one anion selected from the group consisting of BF<sub>4</sub><sup>-</sup>, PF<sub>6</sub><sup>-</sup>, ClO<sub>4</sub><sup>-</sup>, CF<sub>3</sub>SO<sub>3</sub><sup>-</sup> and (SO<sub>2</sub>R<sup>5</sup>)(SO<sub>2</sub>R<sup>6</sup>)N<sup>-</sup> (wherein each of R<sup>5</sup> and R<sup>6</sup> which are independent of each other, is a C<sub>1-4</sub> alkyl group).

11. A process for producing an electric double layer capacitor having electrodes comprising a porous carbonaceous material and a binder, wherein the

(1) a step of curing a liquid thermosetting resin which contains a volatile component having a boiling point of from 120 to 400°C and which has a viscosity of from 0.1 to 100 Pa·s at 25°C, to obtain a cured product;

(3) a step of carbonizing the cured product thus pulverized in a non-oxidizing atmosphere so that the mass reduction till 400°C in the carbonization is from 2 to 50 mass% of the mass before carbonization, to obtain a carbonized product; and

12. The process for producing an electric double layer  
capacitor according to Claim 11, wherein, in the step (1),  
a curing agent is added to the thermosetting resin,  
followed by kneading, and further, a curing accelerator  
is added thereto, followed by kneading to obtain a  
kneaded product, and then said kneaded product is cured  
to obtain a cured product.

25 14. The process for producing an electric double layer capacitor according to Claim 12, wherein the curing accelerator is added in an amount of at most 5 mass%

15. The process for producing an electric double layer capacitor according to Claim 11, wherein the thermosetting resin is a phenolic resin.

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